

Title (en)

Light emitting device and light emitting device package

Title (de)

Lichtemittierende Vorrichtung und lichtemittierende Vorrichtungsverpackung

Title (fr)

Dispositif électroluminescent et emballage de dispositif électroluminescent

Publication

**EP 2657992 A3 20150114 (EN)**

Application

**EP 13165372 A 20130425**

Priority

KR 20120043643 A 20120426

Abstract (en)

[origin: EP2657992A2] Disclosed are a light emitting device and a light emitting device package. The light emitting device includes a first conductive semiconductor layer, an active layer on the first conductive semiconductor layer, a second conductive semiconductor layer on the active layer, a third semiconductor layer between the active layer and the second conductive semiconductor layer, and a light extraction structure on the second conductive semiconductor layer. A top surface of the third semiconductor layer has a Ga-face.

IPC 8 full level

**H01L 33/02** (2010.01); **H01L 33/22** (2010.01); **H01L 33/32** (2010.01)

CPC (source: EP KR US)

**H01L 33/02** (2013.01 - EP US); **H01L 33/22** (2013.01 - EP KR US); **H01L 33/24** (2013.01 - US); **H01L 33/48** (2013.01 - KR); **H01L 33/32** (2013.01 - EP US); **H01L 2224/48091** (2013.01 - EP US); **H01L 2924/12032** (2013.01 - EP US); **H01L 2933/0083** (2013.01 - EP US)

C-Set (source: EP US)

1. **H01L 2224/48091** + **H01L 2924/00014**
2. **H01L 2924/12032** + **H01L 2924/00**

Citation (search report)

- [XYI] US 2010059781 A1 20100311 - YOKOBAYASHI YUSUKE [JP], et al
- [Y] US 2008135856 A1 20080612 - MOON YONG TAE [KR]
- [A] US 2012007121 A1 20120112 - LEE SANG YOUL [KR], et al
- [XI] US 2008035936 A1 20080214 - LESTER STEVEN D [US]
- [A] KR 20090018451 A 20090220 - SAMSUNG ELECTRO MECH [KR]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2657992 A2 20131030**; **EP 2657992 A3 20150114**; CN 103378240 A 20131030; CN 103378240 B 20170922; JP 2013229598 A 20131107; KR 20130120615 A 20131105; US 2013285095 A1 20131031; US 9099610 B2 20150804

DOCDB simple family (application)

**EP 13165372 A 20130425**; CN 201310145342 A 20130424; JP 2013081970 A 20130410; KR 20120043643 A 20120426; US 201313839680 A 20130315